COMPLETE LISTING OF CLAIMS, INCORPORATING AMENDMENTS

IN RESPONSE TO OFFICE ACTION DATED May 31, 2005

FOR SERIAL NO.(10/706,477) FILED NOVEMBER 7, 2003

We claim:

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Original) A fuel cell operable with a quantity of fuel and a quantity of an oxidizer to produce electrical power, the fuel cell comprising:

a fuel cell body including a labyrinth system structured to permit the fuel and the oxidizer to flow therethrough;

at least a first catalyst in fluid communication with the labyrinth; and

at least a first microvalve operably disposed within at least a portion of the labyrinth;

wherein the first microvalve includes a valve body, and deflectable member operable upon the application of a voltage from a voltage source;

a valve body having a first end and a second end, the valve body including an elongated flow channel formed therein and extending substantially longitudinally between the first and second ends to permit substantially longitudinal flow of the fluid therethrough and between the first and second ends; and

the deflectable member disposed on the valve body, the deflectable member including at least a first piezoelectric portion that is piezoelectrically operable to deflect the deflectable member between an open position and a closed position upon the application of a voltage, the deflectable member in the closed position being operable to resist the flow of the fluid through the flow channel.

17. (Cancelled)

18. (Cancelled)

19. (Original) The fuel cell of claim 16, wherein the deflectable member includes an intermediate layer is formed from brass.

20. (Original) The fuel cell of claim 16, wherein the valve body includes a cavity formed therein, at least a portion of the deflectable member being disposed in the cavity.

21. (Original) The fuel cell of claim 16, wherein the deflectable member includes a fixed end and a free end, the fixed end being secured to the valve body; and

the deflectable member including a gate disposed at the free end, at least a portion of the gate being receivable in the flow channel to resist the flow of the fluid through the flow channel when the deflectable member is in the closed position.

22. (Currently amended) The fuel cell of claim 21, wherein ~~wherein~~ the valve body includes a first wafer, a second wafer, and a third wafer; deflectable member includes a fixed end and a free end; the cavity being disposed substantially between the first and second wafers; and the flow channel being disposed substantially between the second and third wafers.

23. (Original) The fuel cell of claim 22, wherein the second wafer includes an opening formed therein; and at least a portion of the gate being receivable in the opening.

24. (Original) The fuel cell of claim 23, wherein the second wafer includes a port formed therein, the port providing fluid communication between the flow channel and the cavity.

25. (Original) The fuel cell of claim 16, wherein the first and second ends of the valve body are opposite on another.

26. (Original) The fuel cell of claim 16 wherein the fixed end and the free end of the deflectable member are opposite one another.